Project B-209

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# WOOD HOUSEHOLD FURNITURE

## A Manufacturing Opportunity in Georgia

Prepared for

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Table of Contents



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Tables

## Summary

Georgia's assets as a location for a new wood household furniture plant include:

1. A freight advantage area (Map 1) in which manufacturers' sales amount to $262 million annually ($167 million in sales of non-upholstered and $95 million in sales of upholstered furniture). Manufacturers' sales of wood furniture in Atlanta alone amount to over $22 million annually.
2. A good supply of soft and hard hardwoods used in furniture production. (See Table 3 and Map 2.)
3. The labor skills required to manufacture most furniture items, as indicated by the present employment of 3,100 people in non-upholstered furniture production and 1,700 workers in the fabrication of upholstered furniture.
4. The display facilities of the Atlanta Merchandise Mart, which contains a million square feet of floor space for lease to furniture and other manufacturers. The Mart has approximately 200 showrooms for homefurnishings display and is expected to be enlarged considerably in the near future.

A new entrant into the furniture manufacturing field who locates in Georgia probably would profit most from the production of non-upholstered items. Products in this category which show significant promise for a prospective manufacturer include bedroom, living room, and dining room furniture and, particularly, wood kitchen cabinets.

# INTRODUCTION

The interest in ways of better utilizing hardwood timber resources in Georgia, combined with the realization that the state is well suited for the manufacture of wood household furniture, gave rise to this study. The purpose of the study is to investigate the assets and liabilities of Georgia as a location for a wood household furniture plant.

The industry is characterized by a large number of small to medium-size plants. In 1958, the 20 largest manufacturers of non-upholstered wood household furniture accounted for only 21% of the industry's shipments. In the production of upholstered wood furniture in the same year, the 20 largest companies accounted for only 25% of that industry's shipments. These percentages contrast strikingly with the comparable figure for metal household furniture manufacture -- 43% of that industry's shipments.

The products of the wood household furniture industry generally are not mass produced. Probably the main exception to this rule is the fabrication of wood kitchen cabinets, which in many instances are produced on a mass assembly-line basis.

Another characteristic of the industry is the prevailing low production wage rates. In 1958, the U. S. average production wage rate for the manufacture of non-upholstered furniture was $1.58 per hour, while that for upholstered furniture manufacture was $1.78 per hour.

Also, plants have tended to locate relatively near a good supply of hardwood timber. Since the cost of hardwood lumber amounts to a significant portion of total material costs (especially for non-upholstered furniture), shipment of lumber over a long distance would add appreciably to total material cost.

In distributing their products, manufacturers deal primarily with retail stores (except for the distribution of wood kitchen cabinets). In 1958, 73% of sales by plants manufacturing upholstered and non-upholstered furniture were directly to retail stores. Only 12% of total sales were to wholesalers. Appendix 1 gives a complete breakdown of the distribution of sales by class of customer.

Products referred to in this report as "non-upholstered furniture" include the following items:

radio, phonograph, television, and hi-fi cabinets
living room, library, sunroom, and hall furniture
dining room and kitchen furniture
bedroom furniture
infants' and children's wood furniture
outdoor and unpainted furniture
wood household furniture, not specified by kind

Products referred to in this report as "upholstered furniture" include the following items:

sofas, davenports, settees, and love seats
chairs, rockers, and reclining chairs
bedroom chairs, benches, and lounges
ottomans and hassocks
upholstered wood furniture, not specified by kind

## ACCESS TO THE SOUTHEASTERN MARKET

### Freight Savings

The magnitude of the cost of shipping furniture as a percentage of the manufacturer's value makes it desirable to locate plants near a large market. This is especially true for non-upholstered furniture.

To illustrate the importance of furniture shipment costs, the freight costs on truckload shipments (10,000-pound minimum) of dining room chairs from Chicago, High Point, and Atlanta to major retailing cities in the Southeast are compared in Table 1.[1/] The charges from Chicago to the Southeast range from 2.56 to 5.10 cents per pound. A comparison of these charges with the average value of the product of 61.6 cents per pound indicates that the freight costs from Chicago range from 4.2% to 8.3% of the value of the product.[2/] Freight charges from High Point range from 2.07 to 3.43 cents per pound, or from 3.4% to 5.6% of product value. Freight charges from an Atlanta plant to the same destinations, by comparison, range from 1.53 to 2.99 cents per pound, or from 2.5% to 4.9% of product value.

Table 1

TRUCKLOAD FREIGHT COSTS ON SHIPMENTS OF WOOD DINING ROOM CHAIRS

(in cents per pound)

| TO | FROM | | |
|---|---|---|---|
| | Chicago Ill. | High Point N. C. | Atlanta Ga. |
| Atlanta, Ga. | 3.44 | 2.07 | -- |
| Birmingham, Ala. | 3.21 | 2.52 | 1.53 |
| Jacksonville, Fla. | 4.26 | 2.47 | 2.07 |
| Memphis, Tenn. | 2.78 | 3.16 | 2.30 |
| Miami, Fla. | 5.10 | 3.37 | 2.99 |
| Nashville, Tenn. | 2.56 | 2.72 | 1.95 |
| New Orleans, La. | 3.85 | 3.43 | 2.50 |

Note: Freight costs are based on a minimum shipment of 10,000 pounds.

1/ Appendix 2 gives motor freight rates from Chicago and High Point on various types of wood furniture.

2/ Appendix 3 indicates the average value per pound for various furniture items.

Obviously, freight costs limit the geographical size of the market that can be economically served from a given location. It is, therefore, desirable to locate near the heart of a large market for furniture.

## Magnitude of Sales in the Southeast

The area where a Georgia plant has a freight advantage over competing points is indicated in Map 1.[1/] Estimated sales at the manufacturers' price level in this area in 1961 amounted to $167 million for non-upholstered and $95 million for upholstered wood furniture.[2/] Since the national growth trend in the furniture business has been remarkably consistent over the years (Figure 1), estimated growth over the next few years of $4 million a year in manufacturers' sales of non-upholstered furniture and $5 million in upholstered furniture in the freight advantage area can be predicted with a high degree of confidence. Therefore, by 1967 annual sales of non-upholstered wood furniture should reach $185 million and sales of upholstered wood furniture should reach $125 million.

Since an average-size plant for either type of furniture ships approximately $500,000 worth of products annually, a single year's growth would be large enough to support at least 16 average-size plants.

According to the U. S. Census of Business, in 1958 Atlanta had 187 furniture stores with total sales of $23 million. Both New Orleans and Miami had more sales by furniture stores than Atlanta, and this might be interpreted as meaning that Atlanta is third in furniture sales. The really large furniture sales in Atlanta, however, are made by stores other than furniture stores. The wood furniture sales alone of the eight largest department and furniture stores in Atlanta are approximately equal to the total sales (including items other than wood furniture) of all 187 furniture stores.

The same U. S. Census report shows that department store sales in Atlanta are much larger than those of any other southeastern city.

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1/ The freight advantage area is the area in which freight costs on shipments of wood furniture are less from Atlanta than from major competing plants in Dallas, Texas; Bloomington, Illinois; and High Point, North Carolina.

2/ See Appendix 4 for computation of estimate.

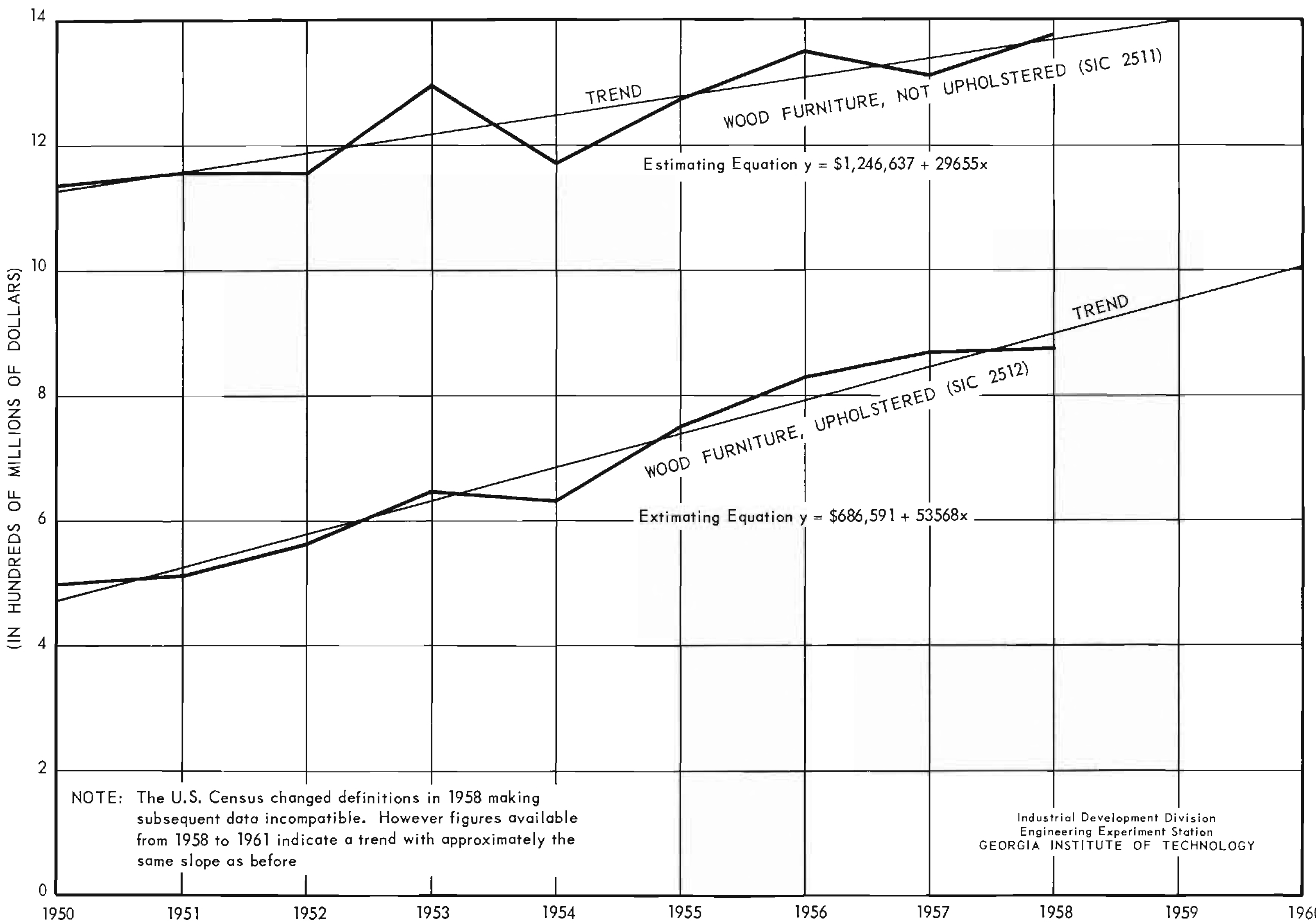
MAP 1

FREIGHT ADVANTAGE AREA FOR A GEORGIA PLANT MANUFACTURING NON-UPHOLSTERED WOOD FURNITURE


Industrial Development Division
Engineering Experiment Station
GEORGIA INSTITUTE OF TECHNOLOGY

FIGURE 1

TREND OF U.S. MANUFACTURERS SHIPMENTS OF WOOD HOUSEHOLD FURNITURE



Moreover, retail sales do not tell the whole story because Atlanta is a wholesale center[1] and, despite the fact that much buying is done by individual stores in the big furniture chains, some buying is done by the home offices for the entire chains. Therefore, since Atlanta is headquarters for most of the bigger chains, even more buying is done in Atlanta than would be indicated by retail sales. A survey of a small number of the largest furniture merchandisers in the city showed purchases of $15 million annually. It is estimated that total purchases exceed $22 million.

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1/ Atlanta wholesales about $15 million in furniture a year, 40% to industrial users, the balance for resale both in and outside Atlanta.

## AVAILABILITY OF MATERIALS REQUIRED FOR PRODUCTION

Material costs account for a major portion of the manufacturer's value of shipments of wood furniture. In the production of non-upholstered items, the cost of materials, parts, containers, and supplies amounts to 45.6% of shipment value. For the upholstered items, the cost of these items accounts for 49.1% of the value of manufacturers' shipments. Table 2 indicates the major usage items and their respective percentages of total material costs for each category of furniture production.

Table 2

PRINCIPAL MATERIALS USED IN THE MANUFACTURE OF WOOD HOUSEHOLD FURNITURE

| Material | Per Cent of Total Value of Materials, Parts, Containers, and Supplies Used: Non-upholstered Furniture | Upholstered Furniture |
|---|---|---|
| Hardwood lumber | 20.8 | 7.5 |
| Softwood lumber | 4.5 | .8 |
| Hardwood veneer | 6.2 | -- |
| Hardwood plywood | 8.0 | .4 |
| Softwood plywood | 1.8 | -- |
| Furniture parts | 3.8 | 8.2 |
| Springs, innerspring units and box spring constructions | .5 | 5.6 |
| Woven upholstery fabrics: | | |
| Cotton | | 12.6 |
| Other (rayon, nylon, etc.) | | 12.1 |

Source: 1958 U. S. Census of Manufactures

As indicated in the above table, wood accounts for 40% of total material costs for non-upholstered furniture. This amounts to 18.2% of product value. Therefore, a nearby supply of lumber -- particularly hardwood lumber -- would be a definite asset.

The largest material costs for upholstered furniture production are for woven upholstery fabrics (24.7%), hardwood lumber, furniture parts, and springs. Even though upholstery fabrics account for the largest item of material cost, location of a furniture plant near the fabric producer is not critical, because shipment of fabrics over fairly long distances does not appreciably increase their delivered cost to a furniture producer. On the other hand, the weighty items are lumber and springs, and proximity to sources of these materials is important from a cost viewpoint.

## Lumber

The volume of hardwood saw timber by species for five geographical divisions of Georgia is given in Table 3. As indicated in the table, the total volume during the 1960-1961 surveying period was about 19.6 billion board feet. According to a 1951-1953 survey by the U. S. Department of Agriculture, 24.5% of hardwood saw timber in the state was grades 1 and 2 -- the grades needed for furniture manufacture. Assuming that this percentage is still the same, the volume of grades 1 and 2 hardwood saw timber in the 1960-1961 period was about 4.8 billion board feet. The volume of pine saw timber in 1960-1961 was 26.3 billion board feet. The estimated percentage of grade 1 pine was 9.0%, or 2.4 billion board feet. The volume of other softwood in the 1960-1961 survey was 2.0 billion board feet. The estimated percentage of grade 1 other softwood was 24.8%, or 0.5 billion board feet.

Map 2 indicates the location of Georgia's hardwood saw timber supply by county. As indicated in the map, the largest volumes are concentrated in a six-county area in the northeast section, in a four-county area in the north central region, and in a 10-county area in the east central section of the state. The greatest volume of hard hardwood saw timber is in the six-county northeast section.

The principal furniture woods which are not produced in volume in the state are cherry, pecan, sycamore, and walnut. Cherry is grown in West Virginia, Maryland, New York, and Pennsylvania. Pecan and sycamore are available in Louisiana and Mississippi.

Table 3

VOLUME OF SAW TIMBER ON COMMERCIAL FOREST LAND IN GEORGIA, BY SPECIES, 1960-1961

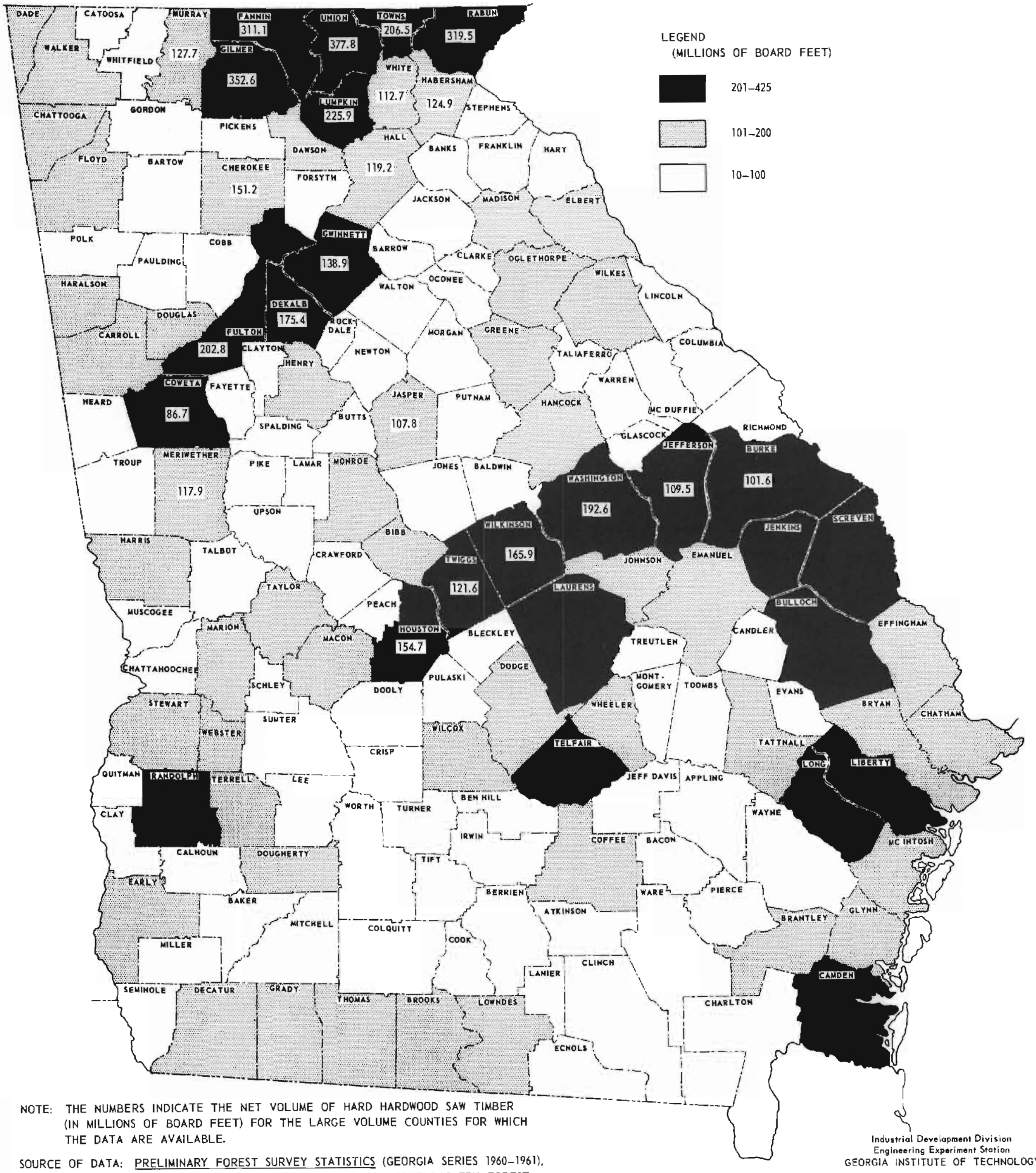
(In Millions of Board Feet)

| Species | North | N. Central | Central | Southwest | Southeast | State Total |
|---|---|---|---|---|---|---|
| Softwoods: | | | | | | |
| Longleaf pine | 15.9 | 48.7 | 534.1 | 1,117.2 | 2,001.6 | 3,717.5 |
| Slash pine | - | 9.5 | 31.6 | 1,591.8 | 5,491.7 | 7,124.6 |
| Loblolly pine | 548.7 | 1,657.9 | 6,026.9 | 782.6 | 1,691.5 | 10,707.6 |
| Shortleaf pine | 953.0 | 1,115.1 | 1,641.0 | 125.6 | 18.9 | 3,853.6 |
| Pond pine | - | - | 132.2 | 90.1 | 356.2 | 578.5 |
| Other yellow pine | 247.1 | 8.6 | 21.0 | 35.3 | 51.4 | 363.4 |
| Total | 1,764.7 | 2,839.8 | 8,386.8 | 3,742.6 | 9,611.3 | 26,345.2 |
| White pine | 231.3 | - | - | - | - | 231.3 |
| Cypress | - | - | 236.8 | 288.7 | 1,248.4 | 1,773.9 |
| Hemlock | 27.4 | - | - | - | - | 27.4 |
| Cedar | - | .8 | 1.1 | - | 2.3 | 4.2 |
| Total | 258.7 | .8 | 237.9 | 288.7 | 1,250.7 | 2,036.8 |
| Total softwoods | 2,023.4 | 2,840.6 | 8,624.7 | 4,031.3 | 10,862.0 | 28,382.0 |
| Hardwoods: | | | | | | |
| Tupelo and blackgum | 79.8 | 93.0 | 855.9 | 508.3 | 1,695.8 | 3,232.8 |
| Sweetgum | 67.7 | 481.1 | 1,312.7 | 143.5 | 538.5 | 2,543.5 |
| Yellow-poplar | 299.9 | 467.1 | 546.1 | 126.1 | 175.4 | 1,614.6 |
| Soft maple | 72.8 | 159.5 | 210.7 | 53.3 | 335.1 | 831.4 |
| Basswood | 7.4 | 3.6 | 4.9 | 4.1 | - | 20.0 |
| Cottonwood | - | 5.9 | 14.2 | - | 1.8 | 21.9 |
| Other soft hardwoods | 37.6 | 118.3 | 420.8 | 123.6 | 279.8 | 980.1 |
| Total | 565.2 | 1,328.5 | 3,365.3 | 958.9 | 3,026.4 | 9,244.3 |
| White and swamp chestnut oaks | 480.3 | 460.8 | 247.7 | 66.5 | 118.4 | 1,373.7 |
| Other white oaks | 687.9 | 159.8 | 237.4 | 95.6 | 245.2 | 1,425.9 |
| Northern red, cherrybark, and shumard oaks | 585.8 | 149.6 | 143.9 | 5.7 | 55.5 | 940.5 |
| Other red oaks | 916.8 | 463.4 | 1,189.3 | 463.2 | 1,125.2 | 4,157.9 |
| Hickory | 400.4 | 372.2 | 556.8 | 64.0 | 134.7 | 1,528.1 |
| Ash | 47.7 | 179.7 | 222.7 | 19.5 | 99.7 | 569.3 |
| Beech | 12.9 | 58.4 | 39.2 | 15.6 | 8.4 | 134.5 |
| Hard maple | - | - | 11.0 | 1.6 | - | 12.6 |
| Yellow birch | - | 1.8 | - | - | - | 1.8 |
| Black walnut | 7.6 | 3.8 | 5.7 | - | - | 17.1 |
| Other hard hardwoods | 32.2 | 97.6 | 91.0 | - | 3.2 | 224.0 |
| Total | 3,171.6 | 1,947.1 | 2,744.7 | 731.7 | 1,790.3 | 10,385.4 |
| Total hardwoods | 3,736.8 | 3,275.6 | 6,110.0 | 1,690.6 | 4,816.7 | 19,629.7 |
| All Species | 5,760.2 | 6,116.2 | 14,734.7 | 5,721.9 | 15,678.7 | 48,011.7 |

Source: Preliminary Forest Survey Statistics (Georgia series 1960-1961), Division of Forest Economics Research, Southeastern Forest Experiment Station, Forest Service, U. S. Department of Agriculture, 1962.

## MAP 2

## NET VOLUME OF TOTAL HARDWOOD SAW TIMBER IN GEORGIA, BY COUNTY, 1961




NOTE: THE NUMBERS INDICATE THE NET VOLUME OF HARD HARDWOOD SAW TIMBER (IN MILLIONS OF BOARD FEET) FOR THE LARGE VOLUME COUNTIES FOR WHICH THE DATA ARE AVAILABLE.

SOURCE OF DATA: PRELIMINARY FOREST SURVEY STATISTICS (GEORGIA SERIES 1960–1961), DIVISION OF FOREST ECONOMICS RESEARCH, SOUTHEASTERN FOREST EXPERIMENT STATION, FOREST SERVICE, U.S. DEPARTMENT OF AGRICULTURE, 1962.

An indication of the fact that Georgia produces lumber of quality suitable for furniture manufacture is given in Table 4.

Table 4

GEORGIA LUMBER USED BY NORTH CAROLINA FURNITURE MANUFACTURERS, 1958

| Type of Lumber | Per Cent of Total Domestic Amount Consumed |
|---|---|
| Soft hardwoods | |
| Gum (sap and red) | 13.8 |
| Gum (tupelo and black) | 10.0 |
| Maple (soft) | 9.7 |
| Poplar | 12.5 |
| Hard hardwoods | |
| Elm | 2.6 |
| Hackberry | 4.2 |
| Oak (red) | 9.5 |

Source: Sources of Lumber for Furniture Plants in North Carolina, Forest Service, U. S. Department of Agriculture.

Over-all, Georgia supplied 7.8% of the total domestic quantity of lumber consumed by all North Carolina furniture manufacturers in 1958. It is worth noting that the North Carolina plants procure outside their state substantial quantities of the same woods that a Georgia manufacturer would import domestically -- cherry, pecan, sycamore, and walnut. The North Carolina facilities in 1958 imported about 55% of the domestic lumber consumed. This was due at least in part to the excess demand of furniture manufacturers on the local wood industry.

It appears that a new plant in Georgia would be in a very favorable position compared with a new one in North Carolina in the local procurement of wood.

## Fabrics

Practically all of the cotton and synthetic fabrics required in the manufacture of upholstered furniture are available in the four-state area which includes Alabama, Georgia, North Carolina, and South Carolina. In 1958, Georgia accounted for 26% of U. S. shipments of cotton sheeting and allied fabrics. South Carolina in the same year shipped 74.5% of total U. S. shipments of cotton print fabrics. The four-state area accounted for 89.8% of the nation's shipments of cotton colored yarn fabrics, toweling and dishcloth fabrics, and napped cotton fabrics.

The states of Georgia, North Carolina, and South Carolina, combined, shipped 61.3% of U. S. shipments of synthetic weaving mill products.

Thus, the fabrics required for upholstered furniture manufacture are produced in quantity in Georgia and its neighboring states. The fact that a Georgia furniture plant would have to import some fabrics from surrounding states is not a significant cost disadvantage since the freight cost on fabric shipments is negligible.

## Springs

The type of springs used in upholstered furniture is not presently manufactured in Georgia. The nearest sources are in North Carolina and Kentucky, and the cost of shipments from these states would be a slight disadvantage for an upholstered furniture manufacturer in Georgia.

## OTHER ASSETS OF A GEORGIA LOCATION

### Labor Skills

Most of the production occupations involved in the manufacture of wood household furniture are classified as semi-skilled and skilled. Although Georgia is not a leading producer of this type of furniture, there are sufficient furniture plants in the state to have trained a sizable quantity of skilled production workers.

According to the Georgia Manufacturing Atlas, there are approximately 3,100 employees engaged in the production of non-upholstered wood household furniture in 153 plants.[1/] In 1958, there were five plants employing over 100 workers and one which employed over 250.

There are approximately 1,700 employees in 24 plants in Georgia involved in the manufacture of upholstered wood household furniture. Four plants in this industry employed over 100 in 1958, while two had over 250 employees each.

### Furniture Display Facilities

A characteristic of large furniture manufacturing areas is the existence of sizable furniture marts in the vicinity. Thus, large furniture marts are found in High Point, Chicago, and Dallas to serve the needs of manufacturers in these areas. The marts serve an important function in bringing buyers and sellers together and in displaying at a central point the complete lines of many different furniture producers.

The largest furniture display facilities in Georgia are found in Atlanta at the Atlanta Merchandise Mart. The mart is a 23-story, $15 million structure which provides a million square feet of floor space for lease to furniture manufacturers and other wholesale firms. Home furnishings, including furniture, occupy about 10 floors of the building. These floors contain almost 200 showrooms representing almost every major line of home furnishings in the nation. Figure 2 gives a sectional diagram of the structure.

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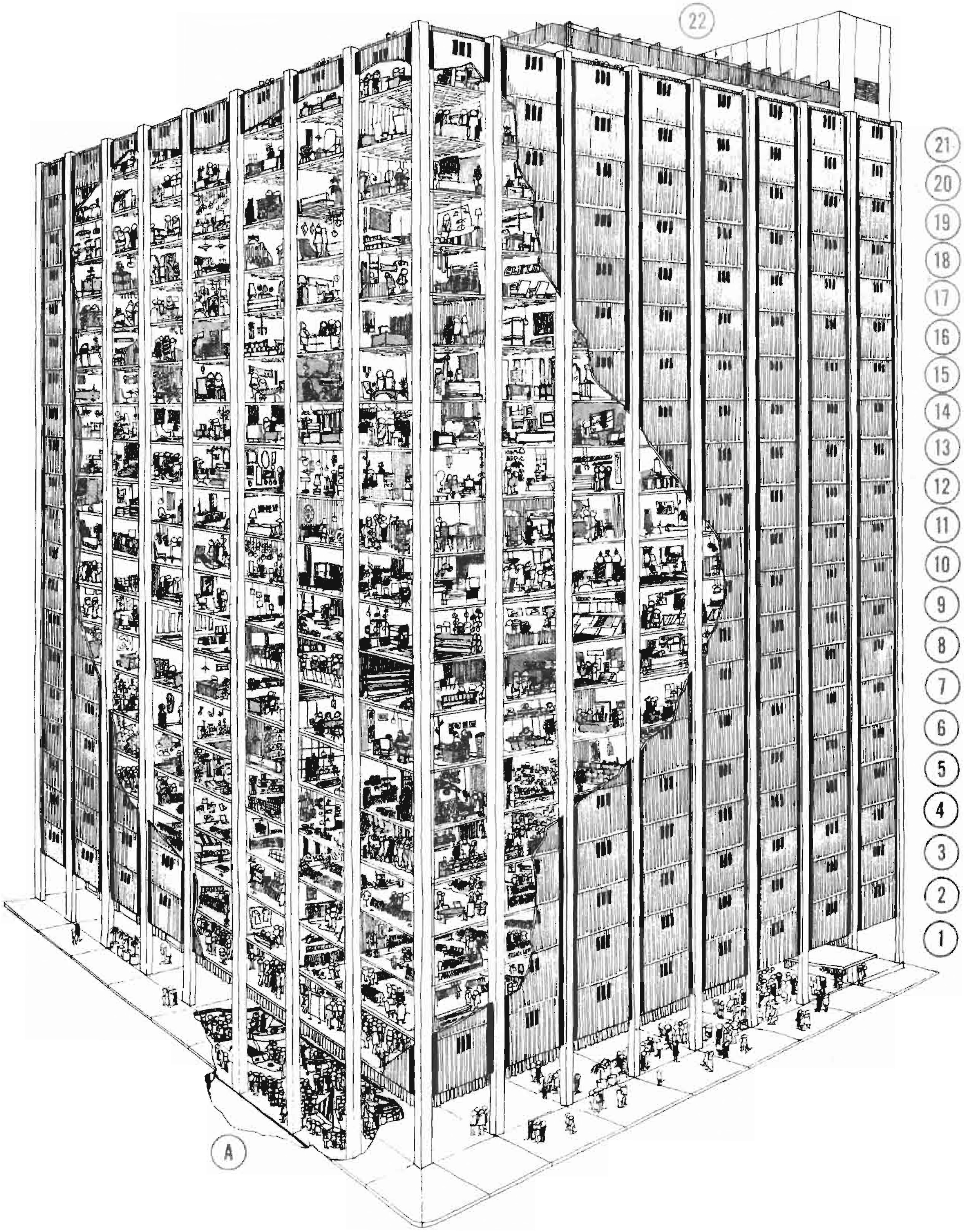
1/ Thera Richter, Georgia Manufacturing Atlas, Industrial Development Division, Engineering Experiment Station, Georgia Institute of Technology, Atlanta, Georgia, 1962.

FIGURE 2
DIAGRAM OF THE ATLANTA MERCHANDISE MART




SOURCE: Atlanta Magazine, May, 1963

Construction of an additional building to adjoin the mart is anticipated in the near future.

The ability of a facility of this type to attract large and small buyers of furniture is well known in the industry. It is an invaluable asset to regional producers of furniture.

## PROSPECTS FOR A NEW ENTRANT INTO FURNITURE MANUFACTURING

A new entrant into the furniture industry is concerned with the type of manufacture to undertake and the products to be made. The following paragraphs attempt to provide a guide to the solution of these problems.

### Types of Manufacture

Whether to produce non-upholstered or upholstered furniture is of prime concern to a new entrepreneur. It appears from a consideration of the competition that would be encountered both within and outside Georgia and from the total labor skills required that non-upholstered furniture manufacture would be the best prospect for a new operator.

Generally, upholstered furniture has a higher value per pound than non-upholstered -- especially the higher priced lines of upholstered items. This means that freight costs, as percentages of the manufacturer's value, are lower on the upholstered products. Consequently, producers of upholstered furniture outside the area can effectively compete with a local producer in terms of delivered cost to the customer. This is not the case with non-upholstered furniture, particularly the medium to low price lines. A local producer can deliver the non-upholstered items with considerable freight savings to local customers.

In addition, competition from existing local producers of non-upholstered furniture should not be as great as that from upholstered furniture manufacturers. While Georgia shipments of upholstered furniture accounted for 2.2% of the U. S. total in 1958, the state's percentage for non-upholstered furniture was only 1.1%. Also, interviews with major Atlanta furniture retailers selling medium to low price items indicate that there is a recognized need for local producers of case goods (non-upholstered items). Most case goods sold in the Southeast come from North Carolina and Virginia.

Generally, the total production labor skills required to produce non-upholstered furniture are less than those required to produce upholstered products. This is indicated by the difference between the average production wage rates of the two industries. The U. S. average for non-upholstered manufacture in 1958 was $1.58 per hour as compared with $1.78 for upholstered furniture production.

## Non-upholstered Furniture Potentials

The particular products in each category of the non-upholstered furniture industry offering the greatest potential for a prospective manufacturer are those for which there is the greatest demand and for which the demand is increasing. The markets for several categories of non-upholstered furniture have expanded significantly in recent years: wood living room, library, sunroom, and hall furniture; bedroom furniture; dining room and kitchen furniture; and wood kitchen cabinets. Figure 3 indicates the general upward trend of national shipments of each of these categories.

Shipments of living room, library, sunroom, and hall furniture in 1958 accounted for 17.1% of U. S. shipments of all non-upholstered wood household furniture. The products accounting for the major portion of shipments in this category were tables, excluding card and telephone tables (57.3%); desks (8.5%); and chairs and rockers (7.6%). These products appear to offer the best potential in this category because of the large demand for them.

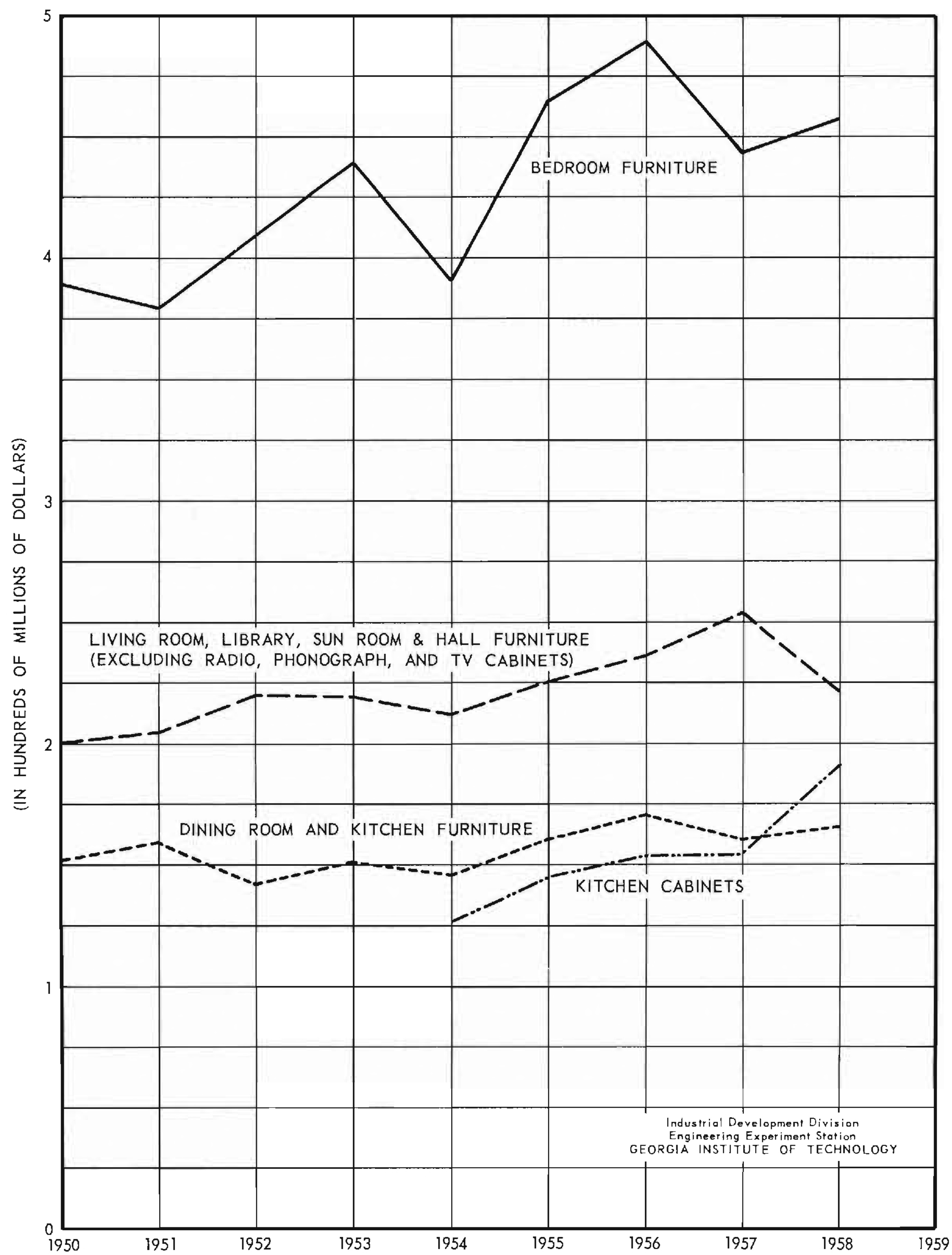
Shipments of bedroom furniture in 1958 accounted for 35.1% of total shipments of all non-upholstered wood household furniture. The major products in this category were dressers, vanities, and dressing tables (45.1% of shipments of bedroom furniture) and chests of drawers, wardrobes, chiffoniers, and chifforobes (24.8%).

Dining room and kitchen furniture shipments amounted to 12.8% of total non-upholstered wood furniture shipments in 1958. The major products in this category included chairs (30.4% of category shipments) and tables (25.1%).

Shipments of wood kitchen cabinets in 1958 amounted to 14.6% of total non-upholstered wood furniture shipments. In terms of value of shipments, the output of this single-item category exceeded that of the dining room and kitchen furniture category and approached the total output of living room, library, sunroom, and hall furniture. As illustrated in Figure 3, the growth trend for wood kitchen cabinets is more pronounced than for any other category of non-upholstered wood household furniture. It appears, therefore, that wood kitchen cabinets offer a particularly promising manufacturing opportunity.

FIGURE 3

U.S. SHIPMENTS OF NON-UPHOLSTERED WOOD HOUSEHOLD FURNITURE



## CONCLUSION

The large and rapidly growing southeastern retail market for wood household furniture presents an excellent opportunity for the establishment of new plants. Georgia offers a central location within this market area (which would make possible significant savings in freight costs), as well as the availability of an abundant supply of lumber, a labor pool skilled in furniture manufacture, and the extensive display facilities of the Atlanta Merchandise Mart, to lure a new entrant into the wood furniture industry. Conditions are especially favorable for the manufacture of non-upholstered items.

APPENDICES

Appendix 1

DISTRIBUTION OF MANUFACTURERS' SHIPMENTS
OF WOOD HOUSEHOLD FURNITURE BY CLASS OF CUSTOMER

| By Manufacturing Establishments (Total: $3,156,000,000) to: | Per Cent of Total |
|---|---|
| Household users and farmers | 2 |
| Other manufacturers | 4 |
| Industrial, construction, institutional, and commercial users; state and local governments | 4 |
| Wholesalers | 12 |
| Stores owned by same company | 12 |
| Other retail stores | 61 |
| Federal government | 1 |
| Others | 4 |
| | 100 |

| By Sales Offices, Sales Branches, and Administrative Offices (Total: $233,000,000) to: | Per Cent of Total |
|---|---|
| Industrial, construction, institutional, and commercial users; state and local governments | 3 |
| Wholesalers | 6 |
| Retail stores owned by same company | 4 |
| Other retail stores | 84 |
| Other manufacturers, Federal government, exports (unspecified) | 3 |
| | 100 |

Source: 1958 U. S. Census of Manufactures

## Appendix 2

## MOTOR FREIGHT RATES ON WOOD FURNITURE

(in cents per 100 pounds)

### Descriptions of Commodities

FURNITURE, namely:
  Wooden:
    Chaise Lounges, Couches, Davenports, Day-beds, Divans, Lounges, Sofas, Sofa-beds or Tete-a-Tetes:
      Upholstered, other than aluminum:
        Other than dual-purpose:

DESCRIPTION A.....With standing backs or arms, in STP.

DESCRIPTION B.....With backs detached or laid down flat, or without backs and without arms or ends, or with arms or ends detached, in STP.

  Chairs, Chair Tables, or Stools:
    Chairs or Stools, NOI:
      Wooden, or with wooden frames, NOI:
        Finished, NOI, not upholstered beyond seat and inside back:

DESCRIPTION C.....SU, in STP.

DESCRIPTION D.....SU, in different STP.

DESCRIPTION E.....Backs and seats removed from bases or frames, bases or frames nested two or more to the nest and backs and seats reversed on top of bases or frames, in STP, or KD, other than flat, in STP.

DESCRIPTION F.....KD, other than flat, in different STP.

DESCRIPTION G.....KD, flat, in STP.

  Tables, NOI:
    Wooden:

DESCRIPTION H.....SU, in STP.

DESCRIPTION I.....KD, finished, in STP.

FURNITURE, namely:
  Wooden, or with wooden frames, upholstered, namely:
    Chaise Lounges, Couches, Davenports, Divans, Lounges, Sofas, Tete-a-Tetes, Day-beds, Chairs, including couch or sofa arms or ends:

DESCRIPTION J.....In wooden boxes, fibreboard boxes or crates.

  Chairs, wooden, or with wooden frames, NOI:

DESCRIPTION K.....Finished, in STP.

  Tables, NOI:

DESCRIPTION L.....SU, in STP.

### Freight Rates from Chicago to Atlanta

| Less than truckloads: | A | B | C | D | E | F | G | H | I |
|---|---|---|---|---|---|---|---|---|---|
| Less than 2,000 lbs. | 772 | 558 | 879 | 772 | 558 | 451 | 388 | 665 | 388 |
| 2,000 lbs. or more | 749 | 535 | 856 | 749 | 535 | 428 | 365 | 642 | 365 |

| Truckloads: | 10M | 12M | 15M | 18M | 22M | 30M |
|---|---|---|---|---|---|---|
| Descriptions A through I | 344 | 313 | 262 | 243 | 222 | 202 |

Appendix 2 (continued)

Freight Rates from High Point, N. C., to Atlanta

| Via carriers participating in SMCRC Tariff 180 which protects rates from High Point to Atlanta: | Less than 500 lbs. | 500 lbs. thru 1,999 lbs. | 2,000 lbs. or more |
|---|---|---|---|
| Descriptions J through L | 469 | 399 | 339 |

| Less than truckload rates generally in effect by all other carriers: | J | C | D | E | F | G | I |
|---|---|---|---|---|---|---|---|
| Less than 2,000 lbs. | 552 | 592 | 522 | 381 | 311 | 269 | 269 |
| 2,000 lbs. or more | 552 | 562 | 492 | 351 | 281 | 239 | 239 |

| Truckload rates generally in effect by all other carriers: | 10M | 12M | 15M | 18M | 22M |
|---|---|---|---|---|---|
| Descriptions A through I | 207 | 189 | 159 | 146 | 122 |

* * *

Explanation of abbreviations and reference marks:

STP -- Specific type packages
NOI -- Not otherwise more specifically described in the classification
SU -- Set up
KD -- Knocked down
M -- 1,000 pounds

## Appendix 3

### AVERAGE MANUFACTURER'S VALUE PER POUND FOR SELECTED ITEMS OF WOOD HOUSEHOLD FURNITURE

| Product | Approximate Average Value per Pound |
|---|---|
| Non-upholstered furniture | |
| Living room | |
| Chairs | $0.415 |
| Tables | .538 |
| Sewing machine cabinets | .441 |
| Desks | .365 |
| Dining room | |
| Tables | .719 |
| Chairs | .616 |
| Buffets | .510 |
| China cabinets | .524 |
| Kitchen cabinets | .746 |
| Bedroom | |
| Beds | .610 |
| Dressers, vanities, dressing tables | .444 |
| Chests of drawers, wardrobes | .569 |
| Upholstered furniture | |
| Sofas (excluding sofa bed and sectional) | 1.203 |
| Sectional sofas | .644 |
| Chairs (excluding reclining) | .763 |
| Reclining chairs | .459 |
| Rockers | .490 |

Sources: Manufacturers' average value per item -- 1958 U. S. Census of Manufactures.

Average shipping weight per item -- Sears, Roebuck Catalog, 1962.

Appendix 4

ESTIMATE OF MANUFACTURERS' SALES IN THE FREIGHT ADVANTAGE AREA

Retail Sales of Furniture Stores

| State | Total Sales |
|---|---|
| Alabama | $ 81,266,000 |
| Florida | 150,398,000 |
| Georgia | 95,493,000 |
| Kentucky | 63,105,000 |
| Louisiana | 41,037,000 |
| Mississippi | 33,700,000 |
| Tennessee | 98,079,000 |
| | $563,078,000 |

Source: 1958 U. S. Census of Business -- Retail Trade

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Computation of Estimate of Manufacturers' Sales

| | | |
|---|---|---|
| (1) | Retail sales of furniture stores in freight advantage area (see above table) | $ 563,078,000 |
| (2) | Retail sales of furniture stores in U. S. | 4,782,721,000 |
| (3) | Sales in freight advantage area as per cent of U. S. total | 11.774 |
| (4) | U. S. shipments of non-upholstered furniture, 1961 | 1,415,758,000 |
| (5) | U. S. shipments of upholstered furniture, 1961 | 813,388,000 |
| (6) | Estimated sales of non-upholstered furniture in freight advantage area, 1961 (item 4 x item 3) | 167,000,000 |
| (7) | Estimated sales of upholstered furniture in freight advantage area, 1961 (item 5 x item 3) | 95,000,000 |

Note: Although it is believed that the above method is satisfactory for obtaining aggregate sales for the seven states, sales by individual states cannot be obtained in this manner because the method fails to take into consideration sales by stores other than furniture stores.

Source for Items 4 and 5: Annual Survey of Manufactures: 1961